

~~http://www.gcg.com~~ the Accelrys™ website), using either a Blossum 62 matrix or a PAM250 matrix, and a gap weight of 12, 10, 8, 6, or 4 and a length weight of 2, 3, or 4.

D1
The percent homology between two nucleic acid sequences can be accomplished using the GAP program in the GCG software package, using standard parameters, such as a gap weight of 50 and a length weight of 3.--

In the claims:

Please cancel claims 43, 44, and 62, without prejudice, and amend claims 39-42 and 45-53 as follows:

D2
39. **(Amended)** An isolated nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, or a full complement thereof.

40. **(Amended)** An isolated nucleic acid molecule consisting of the nucleotide sequence set forth in SEQ ID NO:1, or a full complement thereof.

41. **(Amended)** An isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, or a full complement thereof.

42. **(Amended)** An isolated nucleic acid molecule which encodes a polypeptide consisting of the amino acid sequence set forth in SEQ ID NO:2, or a full complement thereof.

D3
45. **(Amended)** An isolated nucleic acid molecule comprising a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a full complement thereof.

46. **(Amended)** An isolated nucleic acid molecule consisting of a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a full complement thereof.

47. **(Amended)** An isolated nucleic acid molecule comprising a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a complement thereof, wherein said nucleotide sequence encodes a polypeptide which is capable of modulating the production of a fine chemical.

48. **(Amended)** An isolated nucleic acid molecule consisting of a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1, or a full complement thereof, wherein said nucleotide sequence encodes a polypeptide which is capable of modulating the production of a fine chemical.

49. **(Amended)** An isolated nucleic acid molecule comprising a fragment of at least 30 contiguous nucleotides of the nucleic acid sequence of SEQ ID NO:1, or a full complement thereof.

50. **(Amended)** An isolated nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:2.

51. **(Amended)** An isolated nucleic acid molecule which encodes a polypeptide consisting of an amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:2.

52. **(Amended)** An isolated nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:2 wherein said polypeptide is a MCP polypeptide and wherein said polypeptide is capable of modulating the production of a fine chemical.

53. **(Amended)** An isolated nucleic acid molecule which encodes a polypeptide consisting of an amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:2, wherein said polypeptide is a MCP polypeptide and wherein said polypeptide is capable of modulating the production of a fine chemical.

D3